SAP Project Highlights

The University of Mississippi

SAP HERUG 2010

Presentation Abstract

This presentation will feature 3 recent SAP projects at UM – the implementation of the UM Medical Center (UMMC) student system, degree audit, and a new "Service Directory" showcasing the ways in which members of the UM community transform the lives of others.

Presenters

- Kathy Gates
- Al Ling
- Frank Mathew
- Pooja Saxena
- Margaret Walden

“It’s like ‘Avatar’ without the 3D glasses.”

Malcolm Woodfield on the use of videoconferencing for HERUG presentations

Kathy

Frank

Margaret

Pooja

Al

SAP Project Highlights / UM Medical Center Project

Introduction

UMMC Project Background

- Why implement a student system?
- Why SAP?
- Why UM Oxford's landscape?

- Early Milestones
  - Inquiries and visits in 2007 & 2008
  - Project plan / budget set in May 2008
  - Approvals and consulting RFPs in Summer 2008
  - LSI selected as consulting partner in August 2008
  - Formal project kick-off in September 2008

Key Features

- Stand-alone student system
- Separate SAP client
- Sigma ProSAM for financial aid
- Separate portal w/ authentication going back to UMMC Active Directory server
- Single Business Intelligence (BI) environment

✓ In organizational and technical terms, a client is a self-contained unit in an SAP system with separate master records and its own set of tables.

✓ Allows us to split our SAP system into multiple logical sub-systems .

✓We can operate each client as a separate business unit.

myu.umc.edu

my.olemiss.edu

A Few Challenges

- Data Migration
  - Quality of legacy data
  - Fundamental differences in how legacy data is stored vs. modern ERP
- Academic Calendar
  - Transition from Quarters & Semesters to Semesters Only
- In Progress Lawson Implementation
- Interfaces with UMMC HR and Financial Systems
- Special Requirements for Medical and Dental Programs of Study
- Grading Peculiarities
- Numerous Supporting Document Types for Admissions
- *And more …*

Benefits to UM Oxford

- Collaboration and Cost-Sharing
  - Hosting smaller institutions may make UM Oxford less vulnerable to state-wide consolidation efforts (?) and allows us to continue to operate at a high level.
- Jumpstart Business Intelligence Reporting
- New and Improved Admissions Applications
  - Online recommendations
  - Ability to save as in progress
  - Updated technology to Web Dynpro
- Latest SAP Functionality (EhP4)

SAP Project Highlights / UM Medical Center Project

Implementation Details

Project Scope: Phase 1

- Academic Structure
- Student File / Master
- Data Migration
- Basic Prospect Tracking
- Admissions
- Event Planning & Booking
- Grading
- Transcript Generation
- Graduation
- Financial Aid
- Student Accounting
- Digital Imaging
- Essential Reporting
- Portal with Student, Instructor, Advisor, Chair/Dean Self-Service
- Interface with UMMC HR, financial systems, AD
- Infrastructure ~ SAP GUI deployment, printing, network connection between campuses

Project Timeline (2009)

- March 1
  - Financial Aid Go Live
- May 22
  - Academic Structure, Programs and Catalog
  - Policy System
  - Core Student Master Data
  - Web/Portal infrastructure
  - Online FA Award Notif.
- July 1
  - Admissions Applications (Submit)
  - Program Registration via GUI
  - Fee Calculation and Invoice
  - Biller Direct
  - Event Planning
- July 15
  - Booking via GUI
- August 1
  - IHL Census Date Reporting
  - Admissions Workflow
  - Check Application Status
- September 1
  - Grading via GUI
  - View Class Schedule via Portal
  - Online Course Schedule
  - Instructor Self Service (Class Rolls)
- October 1
  - Advisor Self Service
  - Administrator Self Service
  - Student Self Service
- December 1
  - Grading and Progression
  - Transcripts
- Throughout
  - BI Reporting

ASG / Mobius Digital Imaging
UMMC Document Server
UM Oxford Document Server
Sigma ProSAM Financial Aid
UMMC Database
UM Oxford Database
SAP Business Intelligence
Single Organizational Chart with UM Oxford and UMMC reporting to Chancellor
SAP Production System
Consists of multiple application servers and database server
UMMC Client (320)
UM Oxford Client (300)
Portal (myOleMiss) EPP1
Portal (myOleMiss) EPP2
Portal (myOleMiss) EPP3
Portal (myOleMiss) EPP4
Portal (myUMMC) UMMCEPP1
Portal (myUMMC) UMMCEPP2
UMMC Lawson (HR)
UM Oxford LDAP1
UM Oxford LDAP2
UMMC Active Directory
UMMC Blackboard
UMMC Legacy System
UM Oxford Blackboard
UMMC Campus (Jackson, MS)

Single System Multi-Client Architecture

Advantages:

- Although the data is separate, we can leverage the same code across the clients as long as business rules are the same.
- Can have the system up and running in a very short time frame.
- They could easily learn from us and depend on us.

Challenges:

- System Maintenance – Hard to schedule downtime that is convenient to both campuses.
- When changing code have to consider the implications for both campuses.

Provisioning Access to Portal and the Backend

Nightly Account Process Extended to UMMC:

- Provisions/de-provisions user accounts nightly
- Performs updates to the SAP Backend accounts if required
- Pushes account data to UMMC's Active directory Server
- Considerations had to be made for SAP account names because of the shared BW system.

UMMC Portal Branding:

- The portal was branded for UMMC using the know-how from UM
- Quick(er) implementation of UMMC portal

Portal Applications and Single Sign-on

Portal Applications:

- UMMC chose the SLCM specific portal apps that interested them in the UM portal
- We could make these apps easily available to them with minor adjustments based on their requirements

Single Sign On:

- Once UMMC users sign into their portal, they can access other systems via SSO such as:
  - SAP Backend for students to do their course registration and other student self service
  - SAP Biller Direct to pay account balances
  - SAP BW for reports
  - Apache/Tomcat instance for Java apps

Ongoing Support and Maintenance

Ongoing Support:

- Weekly checkpoint meetings and site visits throughout 2009 with UM IT Staff , UMMC staff and onsite consultants.
- Provision for automatically opening tickets for issues at UMMC that require the attention of UM IT Staff.

Software Maintenance:

- Gradual hand over of applications that are completely custom to the medical centre. (Ex: Financial Aid Award Acceptance App.)
- Applications that share a common code base for UM and UMMC will be maintained by UM Staff.

SAP Project Highlights / UM Medical Center Project

Application Overview & Lessons Learned

Updating Bank Details for Students ~ UMMC

- Legacy direct deposit process outsourced
- Vendor would not/could not provide data file in suitable format
- Needed a self-service process to allow students to provide bank details

Updating Bank Details for Students ~ Oxford

- Replaced a paper-based process
- Same framework as the UMMC application (only branding / wording are changed)

Online Account Payments for Students ~ UMMC

- SAP Biller Direct
- Separate instance / separate hardware for DEV and PRD environments
- Uses custom JSP files and style sheets
- Better visual integration within portal
- Not impacted by BD support packages / upgrades

Online Account Payments for Students ~ Oxford

- Leveraged design used at UMMC (same code)
- Rapid roll-out on the Oxford instances of Biller Direct
- Not impacted by BD support packages / upgrades
- Design fits better with the Oxford campus branding

Online Admissions Applications ~ UMMC

- Consolidated admission processes into a single process (except SOM)
- WebDynpro ABAP
- Applicant can save application 'in-progress' and return
- Application fee paid as part of the process
- Printable PDF

Online Admissions Applications ~ Oxford

- Web Dynpro ABAP
- Consolidated all admission-related applications into a single process
  - Undergraduate & Graduate
- Applicant can save their application 'in progress' and return
- Printable PDF
- Application fee paid as part of the process

UMMC Legacy GL Update

- Legacy IBM mainframe environment, circa 1970's
- 80 column EBCIC format
- 4 crosswalk/mapping tables in SAP
- Use SAP PI for nightly transfer

Lessons Learned

- Establish a sound Memorandum of Understanding between campuses
- DIS
- Online registration processes getting more complicated
- Less choices/less decisions
- Ongoing support

SAP Project Highlights

Degree Audit

Degree Audit

- Implemented in May 2008
- 6 complete requirement catalogs for UG, Grad & Pharm programs (134 programs)
- Over 33,000 audits
- Positive feedback from administrators & students.

9/1/2005
Registrar's Office began entering transfer details on student transcripts
12/15/2005
Automated Pre and Co-requisite checking enabled
12/1/2006
Automated follow-up of conditional bookings enabled
4/1/2007 - 6/1/2007
Develop degree audit prototype using out-of-the-box functionality.
12/15/2007
Enable new Web interface for displaying academic programs (Living Course Catalog)
5/31/2008
Go live for degree audit Web interfaces and related reports
7/31/2007
Requirements due for customized degree audit Web interfaces
3/1/2008 - 5/31/2008
Test degree audit Web interfaces
8/1/2005 - 12/31/2006
Transfer articulation and equivalency determination
3/1/2005 - 5/1/2005
Audit and repair of external organizations)
1/1/2006
1/1/2007
1/1/2008
11/1/2006 - 3/31/2007
Configure degree audit in UM SAP system
5/1/2005 - 9/1/2005
Loading of external subjects
6/15/2007
Demonstration of out-of-the-box degree audit functionality to UM Users
8/1/2007 - 8/1/2008
Implement degree audit rules for undergraduate academic programs
8/1/2008 - 12/15/2008
Implement degree audit rules for graduate, pharmacy and law academic programs
8/1/2006 - 8/31/2007
Academic program audit and repair
8/1/2007 - 2/28/2008
Develop UM customized degree audit Web interfaces
Degree Audit Timeline
3/27/2007

Degree Audit ~ UM Customizing

- Advisors Notes and degree audit notes and the business logic of who can see what
- Enabling the print preview feature
- Simulation Requirement Profile adapted to the academic structure at UM
- Controlling what is shown in the degree audit interface for academic work to address the impact related to grades viewing
- Making the application available in different roles and granting access to academic administrators and advisors based on the requirements at different schools.

Degree Audit ~ Challenges

- Recreating unique sub-requirements
- Audit updates
  - Substitutions vs. Exceptions
  - Re-evaluate vs. Re-calculate
- Grades viewing

News

1/27/10 - UM Faculty Senate ponders computer glitch

Melanie Addington
Staff Writer

The members of the University of Mississippi Faculty Senate are trying to find a way to close a loophole in the university's grading system that may have students giving professors unfairly harsh evaluations.

Some UM students discovered a way to see their grades before they were officially posted, according to the Faculty Senate, which met Tuesday. Knowing their grades early may determine how these students evaluate their professors, faculty members say. For instance, if the student knows he or she may be getting a low grade, they may decide to give their instructor a poor evaluation.

The issue of the grade loophole arose when professor Stephanie Noble said having students evaluate their professors and classes at the same time as finals causes extra stress on students and puts them in a poor frame of mind for evaluating their classes. With the loophole, students are checking their grades and then evaluating, Noble said.

"Let's have it just a week earlier when they are not doing their final projects and are completely stressed and then have to evaluate," Noble said. "It is not a fair evaluation of what you are doing."

The Faculty Senate agreed to discuss the possibility of changing evaluations to a different time in the semester at the next meeting on Feb. 9. Professor Jason Ritchie, a faculty senate member, will work over the next two weeks to obtain information as to why the evaluation system is set the way it is and what, if any, changes can be made.

Degree Audit ~ Future Enhancements

- Post-processing functions
  - Program changes
  - Grade changes
  - Catalog changes
- EhP5 Functionality
  - Conversion from BSP to Web Dynpro ABAP
  - Academic Substitutions
  - Refresh Audit

SAP Project Highlights

Service Directory Project

THE UNIVERSITY OF MISSISSIPPI

SERVICEDNA

TRANSFORMATION IS AT OUR CORE

Service Directory Project

"At The University of Mississippi, we have the opportunity and responsibility to move beyond the transformation of individual lives. We must purposefully participate in transforming our community, state, nation, and world."

- Chancellor Daniel W. Jones

Service DNA

- Project to support inauguration of new Chancellor in April 2010
- service.olemiss.edu

- Goals
  - Showcase UM's service mission
  - Help newcomers plug in to service opportunities
- Accomplished using existing SAP infrastructure!

Application Components and Technology

Public Web View:

- Java context in the Apache Tomcat container.
- JCO connector to make RFC calls to the SAP ECC system
- Google APIs to showcase the service projects on a world map

Maintenance Interface:

- Developed using Web Dynpro ABAP
- Used Floorplan Manager
  - OIF (Object Instance Floorplan)
  - GAF (Guided Activity Floorplan)
- Accessed via SAP Portal

Back-end Data Model:

- Custom SAP Object/Infotypes
- Relationships to SAP delivered objects
- Object-oriented – All functionality to store/retrieve was encapsulated in a class
- RFC's to support public interface (wrappers to methods in the class)

Service Directory
Public Interface

THE UNIVERSITY OF MISSISSIPPI

Search UM Web

ABOUT UM | COLLEGES & SCHOOLS | LIBRARIES | RESEARCH | INTERNATIONAL | CULTURE & COMMUNITY | ATHLETICS & RECREATION | QUICK LINKS

SERVICE DIRECTORY

- ○ UM Medical Center (Jackson)
- ◉ UM (Oxford, Tupelo, Southaven)
- ☑ List only current projects (uncheck to list all projects)

Limit to type

Search text

List Projects

THE UNIVERSITY OF MISSISSIPPI
SERVICEDNA
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"At The University of Mississippi, we have the opportunity and responsibility to move beyond the transformation of individual lives. We must purposefully participate in transforming our community, state, nation, and world."

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In preparation for the inauguration of Chancellor Dan Jones, the UM community took the opportunity to reflect on the ways in which its members transform the lives of others through service. To showcase this important aspect of our mission, IT created this service directory. It is a place where our campus community can showcase the important ways in which we serve our community, nation, and world and where people can come to find opportunities to become involved. Many of these activities are hosted by people at the University. Other activities are sponsored by external entities and members of our community participate by volunteering.

View service projects by geographic region.

Click the circles to zoom the map one level down, splitting the clusters into two or more smaller clusters for the geographical area. Continue clicking the circle until no clusters can be formed in order to view all the markers that are a part of the actual cluster in the localized area. (Circle color reflects the number of markers: Blue, 1-9; Yellow, 10-99; Red, 100 or more.) Click the balloon icons to view the details of a particular project.

Service Directory
Public Interface

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SERVICE DIRECTORY

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- ☑ List only current projects (uncheck to list all projects)

Limit to type: Service Learning

Search text: oxford

List Projects

THE UNIVERSITY OF MISSISSIPPI
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Current UM Service Projects

Project listing generated on 04/09/2010 at 10:19:58 AM CDT. Number of projects presented: 4.

EWB-USA Student Chapter, UM
06/01/2008 - ongoing
International - Service Learning
EWB-USA Student Chapter at University of Mississippi

Engineers Without Borders-USA (EWB-USA), www.ewb-usa.org/ , recently accepted the application of a group of persistent, engineering students for a new student chapter of EWB at the University of Mississippi. EWB-USA is a non-profit humanitarian organization ...(**more**)

Nutrition Class at Oxford High
02/01/2009 - ongoing
Local - Service Learning
Students enrolled in the Practicum in Dietetics (FCS 483 course) travel to Ms. Rose Hickey's female health class at Oxford High School once or twice a semester (depending on the number of Practicum students) to teach a nutrition class. The first few semesters, the classes consisted of basic nutrition ...(**more**)

Riverside After School Program
02/23/2010 - ongoing
Local - Service Learning
Riverside Place After School Program is a service learning class for SW 437 Practice with Groups. The overarching goal of the program is to enhance the competency of the participants (children ages infancy to 16) in order to foster school success, problem solving skills, and helathy self-esteem and ...(**more**)

The Pantry
08/01/1987 - ongoing
Local - Service Learning
The Pantry is an all-volunteer organization that provides a family in need with a one-week's supply of food and staples; screening and food distribution every Wednesday and Thursday. The Pantry aids a family in need twice a year and elderly residents every four weeks. Those who are temporarily out of ... (**more**)

SERVICE DIRECTORY

List Projects, Service Directory

The Pantry

08/01/1987 - ongoing

The Pantry is an all-volunteer organization that provides a family in need with a one-week's supply of food and staples; screening and food distribution every Wednesday and Thursday. The Pantry aids a family in need twice a year and elderly residents every four weeks. Those who are temporarily out of work, have unusually high medical bills, single mothers with limited resources and families who have lost their homes due to fire accidents, with a referral from the Red Cross, are the most common clients.

Students that perform community service at The Pantry learn to have a new respect for the dignity of people who are different from themselves. Many students have said that they were dreading doing the service project and some have even said that they were afraid of going to a place that served the poor. However, after completing the service project, students are overwhelmingly positive about the experience. Many express the desire to continue volunteering. They learn that there is nothing "scary" or "dangerous" about people who do not have access to food and that they can help make a difference in someone else's life.

Donations of food items (not home-made) and brown paper grocery bags are always welcome. Call for details on specific service opportunities.

June Rosentreter, director
P.O. Box 588
Phone: 662-832-8001
E-mail: oxfordfoodpantry@yahoo.com
Located at 713 Molly Barr Road, next to the Oxford Police Department.

Local - Service Learning
oxfordfoodpantry@yahoo.com
iTunesU Media
United Way - Oxford, MS - The Pantry
View Service Hours

	Participating	Benefiting
713 Molly Barr Road, next to the Oxford Police Department	200	8000

Project Permalink

Internet | Protected Mode: On

Service Administration

Service Data Model

Project Benefits

- No cost other than labor
- Same application linked in both portals (UM & UMMC)
- Leveraged existing SAP technology
  - Extended existing SAP objects and infotypes
  - Created new service project customer object
  - ABAP Objects
  - Web Dynpro ABAP interface
  - Deployed entire project in about 6 weeks

Questions